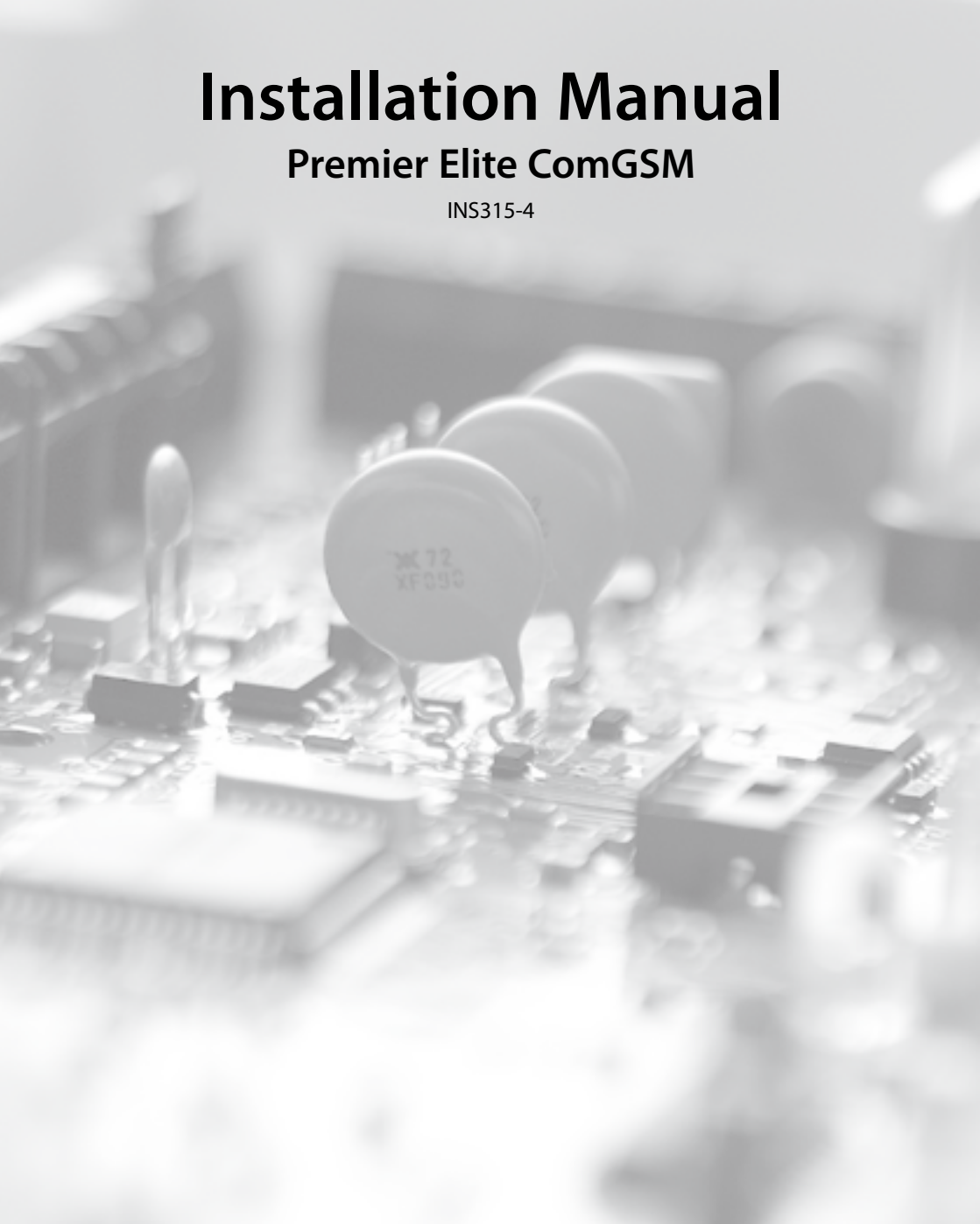
Installation Manual

Premier Elite ComGSM

INS315-4



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1. Introduction

The ***Premier Elite Com GSM*** is a 2G module that can be connected to any ***Premier or Premier Elite*** control panel; however functionality differs depending on the type of Premier panel installed and the type of SIM card that is used. The tables below show which features are available and the type of SIM card required to enable the services.

Premier 24	**SIM Type**		**Panel Port Type**	
Feature	***Dynamic IP***	***Fixed IP***	***GSM Module***	***Com IP***
Report system events (alarms, arm, disarm etc.) via text messaging to mobile telephones	✓	×	✓	×
Remotely arm, disarm and obtain current status of the alarm system via text messaging	✓	×	✓	×
Upload/Download Via GSM	✓	×	✓	×
Alarm reporting to IP enabled receivers (Montex for example) GPRS	×	×	×	×
Upload/Download Via IP GPRS	×	×	×	×

Premier 48/88/168/640 **Premier Elite 24/48/88/168**	**SIM Type**		**Panel Port Type**	
Feature	***Dynamic IP***	***Fixed IP***	***GSM Module***	***Com IP***
Report system events (alarms, arm, disarm etc.) via text messaging to mobile telephones	✓	×	✓	×
Remotely arm, disarm and obtain current status of the alarm system via text messaging	✓	×	✓	×
Upload/Download Via GSM	✓	×	✓	×
Alarm reporting to IP enabled receivers (Montex for example) GPRS	✓	✓	×	✓
Upload/Download Via IP GPRS	×	✓	×	✓

Premier 412/816/816 Plus/832	**SIM Type**		**Panel Port Type**	
Feature	***Dynamic IP***	***Fixed IP***	***GSM Module***	***Com IP***
Report system events (alarms, arm, disarm etc.) via text messaging to mobile telephones	×	×	×	×
Remotely arm, disarm and obtain current status of the alarm system via text messaging	×	×	×	×
Upload/Download Via GSM	×	×	×	×
Alarm reporting to IP enabled receivers (Montex for example) GPRS	✓	✓	×	✓
Upload/Download Via IP GPRS	×	✓	×	✓

NOTE *A secondary form of communications should be used as back up where possible.*

NOTE *When using Alarm reporting over IP with Montex, SIA, Contact ID or, Fast Format may be used, however if using Texbase SIA is NOT supported. Some receivers may require a Fixed IP address, please check with your provider.*

NOTE *The Com port type must be programmed as one or the other, it is not possible to use both GSM and GPRS (IP Only) functionality at the same time.*

SIM Card Types

SIM cards are split into two types:

- **Dynamic IP** SIM cards – the 'everyday' kind of SIM card used in mobile phones. GSM units that use this kind of SIM card can access any data on the internet but cannot be contacted from the internet. This type of SIM card should be used for SMS text messaging & Upload/Download via GSM. A data number will be required to uses Upload/Download.
- **Fixed IP** SIM cards – specialist SIM cards that have a fixed, internet public IP address which means that in addition to being able to access any data on the internet they can be contacted from the internet. For ***Premier Elite ComGSM*** this means they can be used for **both** alarm reporting **and** upload/download via IP (GPRS) If a data number is also available, it is possible to use upload/download via the data number (GSM) instead of the IP address.

SIM cards ***can*** have two different phone numbers:

- Voice Number: used for voice calls and SMS
- Data Number: used for GSM data calls (Upload/Download)

Either of these facilities can be enabled/disabled by the operator.

NOTE *Care should be taken when using Pay as you go SIM cards, make sure you have the ability to Top Up. Pay as You Go SIM cards generally DO NOT have data numbers, please check with your service provider.*

SIM cards purchase

Texecom **DO NOT** supply SIM cards. These will need to be sourced locally, and care should be taken to source SIM cards in the country where the unit is to be used. This will help reduce costs and avoid excessive data charges. When using GSM as the communication method, Data services will need to be enabled for upload/download, this may or may not be the same Telephone number.

GPRS SIM card setup

In order to use **GPRS**, the ***Premier Elite ComGSM*** **must** be programmed with certain parameters which are dictated by the SIM card used. This is no different from mobile phones (often called the 'GPRS Setup') except that mobile phones are often supplied pre-configured.

The configuration consists of the following:

- APN (Access Point Name)
- Username
- Password

These parameters are entered into the ***Premier Elite ComGSM*** using a Texecom PC program called 'APNProgrammer' *(on the Texecom CD supplied with the panel)* with the ***Premier Elite ComGSM*** powered and connected to a PC via a ***Texecom USBCom***.

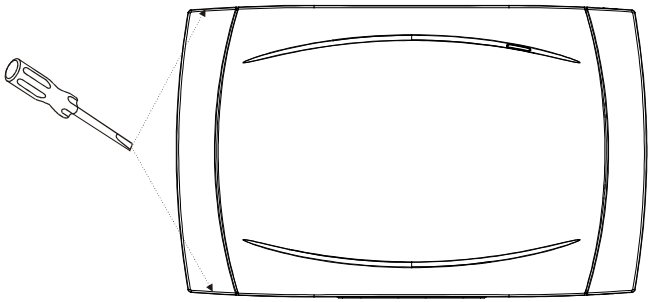
To power the ***Premier Elite ComGSM*** whilst programming connect the supplied harness to the control panel com port, and the other end to the Engineers Keypad port on the ***Premier Elite ComGSM***. The ***Texecom USBCom*** should be connected to the com port on the ***Premier Elite ComGSM***.

Use APNProgrammer to upload the required information to the ***Premier Elite ComGSM***.

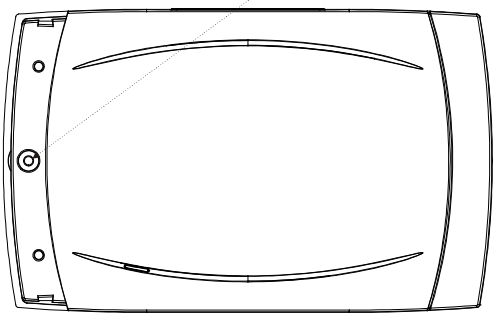
The supplier of the SIM card should provide the information required.

Mounting the ComGSM

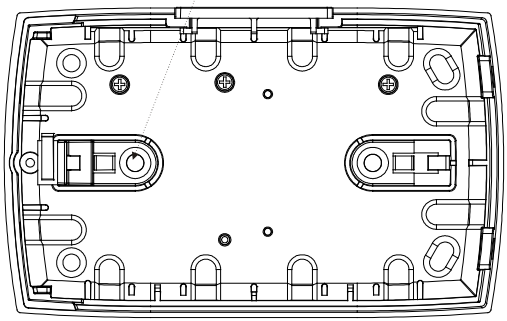
Remove the screw cover by locating the two small indents on the upper and lower edge with a small screwdriver. Excessive force is not required.



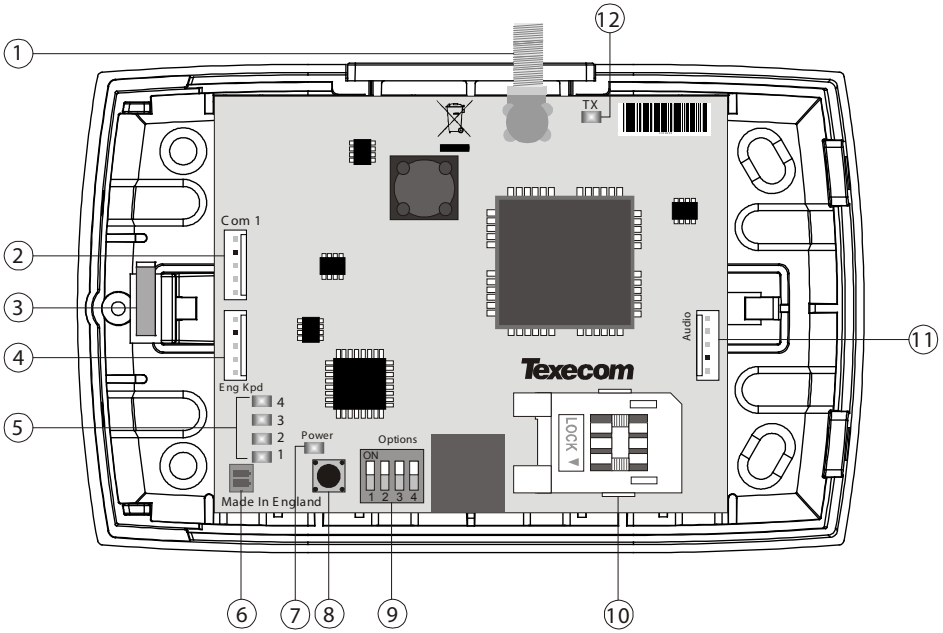
Remove the retaining screw



If removal from mounting tamper detection is required, the housing MUST be fixed at this point.



Premier Elite ComGSM Layout



1. Antenna connection
2. Com1 data connection to *Premier* control panel
3. Tamper switch (Lid and off the wall tamper when fixed correctly)
4. Engineer keypad connector (only used to power the ***Premier Elite ComGSM*** when using APNProgrammer)
5. Status LED's (see table below)
6. Tamper Switch connector
7. Power LED (Green)
8. Tamper switch (not used in this housing)
9. Option switches (see table below)
10. SIM Socket
11. Audio connector (connect when the ComGSM is used as a backup for COM300/COM2400)
12. TX LED (Red flashes when communicating)

Option Switches

The option switches [**8**] function as follows:

Switch	Function	Off	On
1	Tamper Comms	GSM will communicate and will report lid & off the wall tampers.	GSM will communicate and will NOT report tampers from the unit..
2	GPRS server	Normal GSM operation	Accepts connections on port 10001 and allows reporting over GPRS
3	Not Used	For future use leave OFF	
4	Reset	Toggle to reset the unit	

Status LEDs

The four status LED's [**5**] indicate the following:

LED	Off	On	Slow Flashing	Fast FIshing
1	Panel NOT Ready	Panel Ready	Panel Communicating with GSM	GSM transmission/call in progress
2	GSM NOT Ready	GSM Ready	GSM Communicating with Panel	
3	No Signal (less than 40% Signal Strength or -88dBm)	Good (better than 66% Signal Strength or -77dBm or better)	Marginal (between 40%-66% or -88 ~ -77dBm)	N/A
4	Heartbeat LED			

NOTE *The signal strength LED works for both GSM and GPRS modes; however the dBm reading is only seen on the keypad in GSM mode.*

Aerial Siting

ALWAYS do a site survey to find an area of strong signal before installation. Installing a Com GSM with a weak signal is bad installation practice.

The aerial should be mounted vertically (see below) at the point of strongest signal. This is usually the highest point in the building (often the loft area).

NOTE *The aerial must be installed internally*

Avoid installing the aerial directly under metal roofs or within metal skinned buildings because this will reduce the signal strength and may inhibit operation completely. If this is unavoidable, the strongest signal will be found away from the metal roof or close to large external windows or skylights.

Avoid installing the aerial close (2 metres) to cable runs, ducting, structural metalwork, metal pipes, water tanks and electronic equipment, e.g. photocopiers, fax machines etc. These can have similar effects to metal roofs.

Reliable operation is unlikely with a low signal strength. If the display shows that the signal strength is 40% (-88dBm) or lower, you should improve the signal strength. This may be achieved by repositioning the aerial. The GPRS aerial lead should not be cut, therefore repositioning the aerial may require that the ***Premier Elite Com GSM*** is also repositioned. The aeriel lead may be extended by a maximum of 10 Mtrs.

The DualCom® CS2366 Radio Test Set is ideal for surveying a site. This handheld unit can check the availability, signal strength and interference status of all surrounding Base Stations. In addition, it will identify the best location for a GPRS aerial within the building, help to avoid sources of interference and can confirm the availability of a GPRS service at the proposed site.

Where a Nokia 'Net Mon' phone is available and a Vodafone SIM Card is fitted, it may be used in the same manner as the CS2366 Radio Test Set.

Alternatively, a Vodafone mobile phone may be used to locate the point of strongest signal. The signal strength indicator is normally a bar or line at the side of the display on the mobile telephone. Note: The mobile phone MUST use the Vodafone network. A mobile phone that uses a different radio network will NOT show the correct signal strength.

This 'mobile phone' method cannot provide information on the availability, signal strength and interference status of all radio Base Stations in the surrounding area. Use of the CS2366 Radio Test Set is recommended.

When you have identified the point of the strongest signal, make a note of this point and use it when installing the ***Premier Elite Com GSM*** aerial.

Remember: It is always easier to find the point of strongest signal before the equipment is fitted to a wall. Moving aerials, cables, trunking etc. after installation is wasted time and effort.

Installation

The ***Premier Elite Com GSM*** module should be installed as close to the control panel as possible, so that the harness lead supplied with the unit is able to plug onto the control panel communication port.

NOTE *The connection harness cannot be extended.*

1. Route the harness lead into the module housing using the cable entry plate at the top of the unit, and plug the connector onto COM1 [**2**]
2. Install the module in the required location using suitable fixings.
3. Route the other end of the harness lead into the control panel housing. DO NOT CONNECT at this point.
4. Connect the GSM antenna to the antenna connector on the module [**1**] and site the antenna as high as possible.
5. Unlock the SIM socket by sliding the locking tab downwards. Insert the SIM card into the holder with the chamfered corner to the top left. Push the holder back into position and lock the SIM by sliding the locking tab upwards.

   NOTE *The SIM card must be inserted before connecting the Premier Elite ComGSM module to the control panel, and must not be removed until after the power supply to the Premier Elite ComGSM module has been deactivated.*
6. Set the option switches as required, see page 6.
7. Now connect the harness lead onto the control panel communication port (COM 2 for the *Premier 24*; COM 1 or 2 for the *Premier 48*/*88*/*168*/*640 Premier Elite 24*/*48*/*88*/*168*/*640*& *Premier 412*/*816*/*816Plus*/*832*).

The module should now be powered and the heartbeat LED [**5**] should be flashing.

NOTE *You should check and confirm that the signal strength is still the same as recorded during the site survey.*

2. Panel Configuration

Premier & Premier Elite 24/48/88/168/640

Text Messaging and Upload Download via GSM

GSM Mode (panel port programmed as GSM Module, Dynamic IP SIM card)

1. Enter "Engineers Programming" mode and select "UDL/Digi Options", then select "Com Port Setup". Ensure Com Port is programmed as "GSM Module".

Now select the "Digi Options" menu and make sure that "Digi Option 1" is programmed for "Digi is Enabled".

Now select "Program Digi" and ensure the following options are programmed for one of the ARC options:

a) Protocol: "SMS Messaging".

b) Primary No: The number of the recipient's mobile telephone.

c) Secondary No: Secondary mobile telephone number (if required).

d) Account No: Leave blank.

e) Dialling Attempts: Program as required.

f) Report Areas: Program as required.

g) Reports: Program as required.

h) Config.: Program as required.

i) Protocol Options : Program as required.

j) UDL Options : Change rings before answer to 1 if using GSM Upload/Download.

All three status LED's should now be on,(it can take up to 1 minute for the LED's to become stable.) if status LED 3 is off or flashing, this indicates a low GSM signal level. If the signal level is low, try moving the antenna to improve the reception.

Using the SMS Control Commands

Control commands can be sent to the *Premier Elite ComGSM* module to allow remote control and interrogation of the alarm system.

1. Select the send text message option on your mobile telephone.
2. Enter the telephone number of the *Premier Elite ComGSM* module.
3. Enter the text command, see SMS Control Commands.
4. Select send on your mobile telephone.

When using the SMS Control Commands shown in the tables below the following should be noted:

???? = User code, this must proceed all commands.

[areas] = Areas 1 to 8 or A to P. If the areas are not specified then all areas will be selected.

[s] = Send back status report

(zones) = List of zones, each zone must separated by a space e.g. 1 12 167 etc.

(outputs) = List of outputs, e.g. 1234 etc.

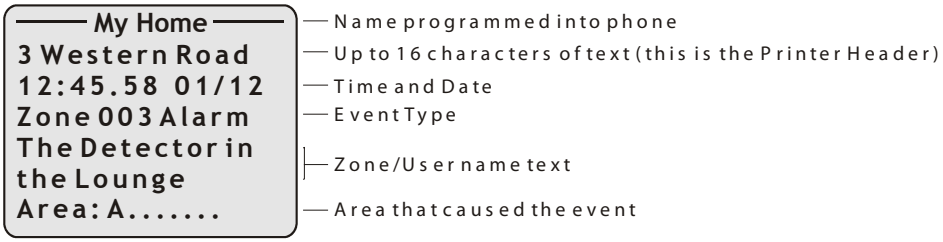
(message) = A maximum of 32 characters.

***Premier 24* SMS Control Commands**		
Operation	**Command**	**Example**
Arm System	???? **arm** [s]	"5678 arm s" = arm the system and report back status.
Part Arm System	???? **parm** (1/2/3) [s]	"5678 parm 1" = part arm 1 the system (no status)
Disarm System	???? **darm** [s]	"5678 darm" = disarm the system (no status).
Reset System	???? **reset**	"5678 reset" = reset the system
Turn Outputs On	???? **op on** (outputs) [s]	"5678 op on 2" = turn PC output 2 on.
Turn Outputs Off	???? **op off** (outputs) [s]	"5678 op off 1 s" = turn PC output 1 off and report back status.
Pulse Outputs On	???? **op on** (outputs) [p]	"5678 op on p" = pulse PC output 2 on.
Pulse Outputs Off	???? **op off** (outputs) [p]	"5678 op off p" = pulse PC output 2 off.
Send Message	???? **mess** (message)	"5678 mess How Are You" = Displays How Are You on all keypads.
System Status	???? **status**	"5678 status" = System (Disarmed or Armed) PC Output 1 ON PC Output 2 ON

Premier 48/88/168/640 & Premier Elite 24/48/88/168/640 SMS Control Commands		
Operation	**Command**	**Example**
Arm System	???? **arm** [areas][s]	"5678 arm s" = arm all areas and report back status.
Part Arm System	???? **parm** (1/2/3)[s]	"5678 parm 1" = part arm 1 all areas (no status)
Disarm System	???? **darm** [areas][s]	"5678 darm abcs" = disarm areas abc and report back status.
Reset System	???? **reset** [areas]	"5678 reset" = reset all areas
Omit Zone(s)	???? **omit** (zones)	"5678 omit 1 5 12" = omit zones 1, 5 and 12
Unomit Zone(s)	???? **uomit** (zones)	"5678 uomit 12" = reinstate zone 12
Turn Outputs On	???? **op on** (outputs)[s]	"5678 op on 134" = turn PC outputs 1, 3 and 4 on.
Turn Outputs Off	???? **op off** (outputs)[s]	"5678 op off 4s" = turn PC output 4 off and report back status.
Pulse Outputs On	???? **op on** (outputs) [p]	"5678 op on p" = pulse PC output 2 on.
Pulse Outputs Off	???? **op off** (outputs) [p]	"5678 op off p" = pulse PC output 2 off.
Send Message	???? **mess** (message)	"5678 mess How Are You" = Displays How Are You on all keypads.
System Status	???? **status**	"5678 status" = Armed: (1 - 8 or A - P) Alarm: (1 - 8 or A - P) Output: (1 - 8) Mains: (OK or Fault) Battery: (OK or Fault) Phone Line: (OK or Fault)
Output Status	???? **status O**	"5678 status O" = Armed: (1 - 8 or A - P) Alarm: (A - P) Channels: (1 - 8) Digi: (1 - 8) Panel: (1 - 5) Mains: (OK or Fault) Battery: (OK or Fault) Phone Line: (OK or Fault)
GSM/Radio-Pad Status	???? **status R**	"5678 status R" = Serial: ******* (only if Radio-Pad fitted) NUA: ****** (only if Radio-Pad fitted) FSS: *###* (only if Radio-Pad fitted) RSS: *###* (only if Radio-Pad fitted) BER: *###* (only if Radio-Pad fitted) CRC: *###* (only if Radio-Pad fitted) GSM-Signal: *###* GSM-BER: *###*

What will be sent in the Text Message

The following information will be received in the text message:



Premier 48/88/168/640 & Premier Elite 24/48/88/168/640

Alarm Reporting & Upload/Download via IP

IP Mode (panel port programmed as ComIP, fixed IP SIM card)

1. Enter "Engineers Programming" mode and select "UDL/Digi Options", then select "Com Port Setup". Ensure Com Port is programmed as "ComIP". Leave the IP address, port & gateway blank.
2. Now select the "Digi Options" menu and make sure that "Digi Option 1" is programmed for "Digi is Enabled".
3. Now select "Program Digi" and ensure the following options are programmed for one of the ARC options:
   a) Protocol:Program as required.
   b) Account No: Program as required
   c) Dialling Attempts: Program as required.
   d) Report Areas: Program as required.
   e) Reports: Program as required.
   f) Config.: Program as required.
   g) Protocol Options : Program as required.
   h) For Upload/Download via Wintex edit the Account/Panel Details and fill in the IP address you have been given and Port number.

All three status LED's should now be on, if status LED 3 is off or flashing, this indicates a low GSM signal level. If the signal level is low, try moving the antenna to improve the reception.

Premier 412/816/816 Plus/832

Alarm Reporting and Upload/Download via IP

IP Mode (panel port programmed as Com IP, fixed IP SIM card)

1. Enter "Engineers Programming" mode and select "Communicator Options", then select "Download Options 76". Ensure Com Port Option 5 is programmed as "ComIP" option 3.
2. Leave the following blank Local IP address, Local IP Port & Gateway
3. Now select the "Communicator Options" menu and "Enable Communicator"
4. Now select "ARC's" and ensure the following options are programmed for one of the ARC options:
   a) Protocol : Program as required.
   b) Report for : Program as required
   c) Account Numbers : Program as required.
   d) Reporting Options : Program as required.
   e) Protocol Options : Program as required.
   f) For Upload/Download via Wintex edit the Account/Panel Details and fill in the IP address and Port number you have been given.

All three status LED's should now be on, if status LED 3 is off or flashing, this indicates a low GSM signal level. If the signal level is low, try moving the antenna to improve the reception.

Specifications

Electrical	
Supply:	9 to 14VDC
Current Consumption:	35mA quiescent; 100mA when active
Environmental	
Operating Temperature:	-10°C to +55°C
Maximum Humidity:	95% non-condensing
Physical	
Dimensions:	145mm x 90mm x 30mm
Packed Weight:	200g (approx.)

Standards

CE

2004/108/EC (CE directive): Hereby, Texecom declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC.

Weee Directive: 2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

RoHs Directive: 2002/95/EC RoHS Compliant. Hereby, Texecom declares that this device does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated depheny ethers (PBDE) in more than the percentage specified by EU directive 2002/95/EC, except exemptions stated in EU directive 2002/95/EC annex.

This product is a Type B Moveable device and is suitable for use in systems designed to comply with EN 50131-1, EN50131-3 and PD6662 at Grade 3 and Environmental Class II. ATS Class 3

Warranty

All Texecom products are designed for reliable, trouble-free operation. Quality is carefully monitored by extensive computerised testing. As a result the *Premier Elite ComGSM* module is covered by a two-year warranty against defects in material or workmanship. As the *Premier Elite ComGSM* module is not a complete alarm system but only a part thereof, Texecom cannot accept responsibility or liability for any damages whatsoever based on a claim that the *Premier Elite ComGSM* module failed to function correctly. Due to our policy of continuous improvement Texecom reserve the right to change specification without prior notice. *Premier* is a trademark of Texecom Ltd.

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